

## **Ch 2q23-q31**

**Centromere**

1cM	D2S142
4cM	D2S284
4cM	D2S156/ D2S354
	D2S111
5cM	
2cM	D2S294
	D2S335
6cM	

**IGE locus**

29 cM

2cM	D2S324
2cM	D2S384
	D2S152
8cM	

**Telomere**

D2S311

**FIGURE 1**

1Ax00.1

NaC-340 TGTGTTCTGCCCAAGTGAGACT  
NaC-341 CTTCCCTGCTCTGCCCAAATGAAT  
257 bp 53.4C

1Ax00.2

NaC-342 GGCGATGTAATGTAAGGTGCTGTC  
NaC-343 GTGCCTTCAGTTGCAATTGTTCAAG  
259bp 54.5C

1Ax01.1

NaC-268, TTAGGAATTTCATATGCAGAATAA,  
NaC-269 TGGGCCATTTTCGTCGTC  
201 bp 50.9C

1Ax01.2

NaC-270 GAAAGACGCATTGCAGAAGAAAAGG,  
NaC-271 CTATTGGCATGTGTTGGTGCTACA  
277bp54.4C

1Ax02

NaC-45 GTGCTGGTTCTCATTAACTTAC,  
NaC-46 TTCCCAAACCTAACATTGATATTAGC,  
319 bp 49.9C

1Ax03

NaC-87, GCAGTTGGGCTTTCAATGTTAG,  
NaC-88, GACACAGTTCARAATCCCRAATG,  
234 bp 48.9C

1Ax04

NaC-63, TTAGGGCTACGTTCAATTGTATG,  
NaC-64, AGCACTGATGGAAAACCAAACATAT,  
338 bp 50.8C

1Ax05

NaC-164 AGCCCATGCAGTAATATAAATCCT  
NaC-165 TCCAGGCTGATAAGCTATGTCTAA,  
488 bp 52.8C

FIGURE 2

1Ax06

NaC-276, CTGTGCCCTGCCTGAGCGTATT,  
NaC-277 CCAATTCTACTTTAAGGAAATG,  
248bp 50.3C

1Ax07

NaC-272, AAATACTTGTGCCTTGAA,  
NaC-273, GTACATACAATATACACAGATGC  
240 bp 46.7C

1Ax08

NaC-89, AGGCAGCAGAACGACTTGTAAATA,  
NaC-90, ATCCGGTTTAATTCATAACTCA,  
267 bp 51.9C

1Ax09.2

NaC-217 GTTGAGCACCCCTAGTGAATAATA,  
NaC-218 TCACACGCTCTAGACTACTTCTCT  
337bp 52.7C

1Ax10a NaC-29, TGCAAATACTCAGCCCTTCAAA,  
NaC-30, TTCCCCACCAGACTGCTCTTC,  
239bp, 55.1C

1Ax10a

NaC-31, GCAGCAGGCAGGCTCTCA,  
NaC-32, TCTCCCATGTTTAATTTCAACC,  
293bp, 54.5C

1Ax10b

NaC-67, ATAATCTTGCAAAATGAAATCACA,  
NaC-68, ATCCGGGATGACCTACTGG  
307 bp 53.7C

1Ax10b

NaC-65, GATAACGAGAGCCGTAGAGATTCC,  
NaC-66, AGCCAGCCATGCCTGAACCA  
282bp 56.4C

FIGURE 2 (cont'd)

1Ax10c

NaC-39, TGTTGCTTGTCAATTGCTCAA,  
NaC-40, TGCACATTCCAACTCACAAA,  
286bp, 50.7C

1Ax11.1

NaC-69 AAGGGTGTCTCTGTAACAAAAATG,  
NaC-70, GTGATGGCCAGGTCAACAAA  
269bp 50.8C

1Ax11.2

NaC-71 CTGGGACTGTTCTCCATATTGGTT,  
NaC-72, TTTGCAGGGGCCAGGAAG  
294 bp 53.3°C

1Ax12

NaC-41 CATTGTGGAAAATAGCATAAGC,  
NaC-42, GCAAGAACCCCTGAATGTTAGAAA,  
334bp, 51.2C

1Ax13.1

NaC-92 TAATGCTTTAAGAACATACACAAA,  
NaC-93, CCAGCGTGGGAGTTGACAATC,  
256bp, 51.1C

1Ax13.2

NaC-75 CGGCATGCAGCTCTTGGTA,  
NaC-91, ATGTGCCATGCTGGTGTATTTC,  
277 bp 55.6C

1Ax14.1

NaC-79 CACCCATCTTCTAACACTATGC,  
NaC-80, CAGCAATTGGAGATTATTCAATT,  
254 bp 50.4C

1Ax14.2

NaC-81 GCAGCCACTGATGATGATAA,  
NaC-82, CTGCCAGTTCCTATACCACTT,  
269 bp 49.4C

FIGURE 2 (cont'd)

**1Ax14.3**

NaC-83 TACAGCAGAAATTGGGAAAGAT,  
NaC-84, GTATTCATACTACCTACCCACACCTAT,  
269 bp 50.2C

**1Ax15**

NaC-202 TTCTTGGCAGGCAACTTATTACC,  
NaC-203 TAAGCTGCACTCCAAATGAAAGAT  
233bp 53.1C

**1Ax16.1**

NaC-187, GGCTGAATGTTCCACAAC,  
NaC-168 GTTCAACTATTGGAAACACG  
277 bp, 51.4C

**1Ax16.2**

NaC-188, AGGCAGAGGAAAACAATGG,  
NaC-189, ACAAGGTGGATAATTAAAAATG  
234 bp, 50.3C

**1Ax17**

NaC-143, GTTTCTCTGCCCTCCTATTCC,  
NaC-144, AAGCTACCTTGAACAGAGACA,  
330 bp, 48.8C

**1Ax18**

NaC-139, AATGATGATTCTGTTATTA,  
NaC-140, AATTGCCCATTCCCTTTG,  
272 bp, 46.1C

**1Ax19.1**

NaC-219 TTGACATCGAAGACGTGAATAATC,  
NaC-220 CCATCTGGGCTCATAAACTTGTA  
285bp 49.3C

**1Ax20**

NaC-338 CCCTTGAAAATTATATCAGTAA,  
NaC-339 ATTTGGTCGTTATGCTTTATTG  
230 bp 47.6C

**FIGURE 2 (cont'd)**

1Ax21

NaC-252, TCCAGCACTAAAATGTATGGTAAT,  
NaC-253, ATTGGCAGAGAAAACACTCC  
261 bp 49.8C

1Ax22

NaC-254, TTTTAGCCATCCATTCTATTTC,  
NaC-255, TATTTCCCCATATCATTTGA  
223 bp 49.1C

1Ax23.1

NaC-256 TTGCAAGAAACTAGAAAGTC,  
NaC-257 TTGATGCGTGACAAAATGG  
250bp 48.3C

1Ax23.2

NaC-258 GACCAGAGTGAATATGTGACTACC,  
NaC-259 CTGGGATGATCTTGAATCTAATC  
246bp 49.5C

1Ax24.1

NaC-221 GCAACTCAGTTCATGGAATTGAA,  
NaC-222 CTTGTTTCGTTAAAGTAGTA  
289bp 56.1C

1Ax24.2

NaC-213 CAAAGATCACCCCTGGAAGCTCAGTT,  
NaC-223 TTCAAGCGCAGCTGCAAACGTGAGAT  
277bp 55.8C

1Ax24.3

NaC-260 ACATGGCCTCCTACTCTTCCTA,  
NaC-261 ACAGATGGGTTCCCACAGTCC  
268 bp 55.3C

1Ax24.4

NaC-262 TAACGCATGATTCTTCACTGGTT,  
NaC-263 ATCCCAAAGATGGCGTAGATGA  
262 bp 54.9C

FIGURE 2 (cont'd)

1Ax24.5

NaC-308, TGAGAAATAGGCTAAGGACCTCTA,  
NaC-309 CCTAGGGCTGGATTCC  
244 bp 53.2C

1Ax24.6

NaC-310, AAGGGGTGCAAACCTGTGATTIT,  
NaC-311 AGGGCCATGTGGTTGCCATAC  
252 bp 53.4C

1Ax24.7

NaC-312 CTTCCGGTTATGTTTCATTCT,  
NaC-313 TCTTATTAGTTGCACATTAA  
278bp 48.4C

1Ax24.8

NaC-364 CAATCCTCCAAGGTCTCCTATC,  
NaC-365 TTTCATCTTGCCTTCTTGCTCAT  
326bp 52.4C

1Ax24.9

NaC-366 CATGTCCACTGCAGCTTGTCCA,  
NaC-367 TCCCCTTACACAGAGTCACAGTT  
292bp 53.1C

FIGURE 2 (cont'd)

a. Glu1238Asp:  
normal: GCA TTT GAA GAT ATA;  
patient R10191 with IGE: GCA TTT GAC GAT ATA.

b. Ser1773Tyr:  
normal: ATC ATA TcC TTC CTG;  
patient R9049 with IGE: ATC ATA TmC TTC CTG; TCC>TAC

**FIGURE 3**

2Ax00.1 NaC-235 ATGGGTTGAATGACTTCTGACAT, NaC-236  
AGGCATITCCTGTACAGGGACTAC  
266bp 52.7C

2Ax00.2 NaC-237 ACAGGAAATGCCTCTTACTTC, NaC-238  
TTTCCCCAAGGATTCTACTACTGT  
277bp 50.6C

2Ax01 NaC-100, AGTCATGTAAC TGACACAATCAC, NaC-101,  
CTTGCCTTCCTGTTGGGTCTCT  
241 bp 53.7C

2Ax01 NaC-11 TCCGCTTCTTACCAGGGAATC, NaC-102,  
AGGCAGTGAAGGCAACTGACTAA, 259  
bp 55.1C

2Ax02 NaC-96, CAGGGCAATATTATAAATAATGG, NaC-97,  
TTTGGAAAATGTGTAGCTCAATAA,  
289 bp 48.7C

2Ax03 NaC-43, AAGGCATGGTAGTGCATAAAAG, NaC-44,  
ATGAAACATAAAGGGAGGTCAA, 201  
bp, 49.3°C

2Ax04 NaC-47, AATGTGAGCTTGGCTATTGTCTCT, NaC-48,  
ATAGGCTCCCACCAGTGATTAC,  
213 bp, 50.9°C

2Ax05 NaC-49, AGGCCCTTATATCTCCAAGT, NaC-50,  
CAACAAGGCTTCTGCACAAAAG, 241  
bp, 53.9°C

2Ax05.2 NaC-110, CTTGGTGGCTTGCCCTTGAC, NaC-111, TCATGAGTGTGCCATCAGC,  
223  
bp, 51.1C

2Ax05.3 NaC-112, GGAAAGCTGATGGCGACACT, NaC-113,  
CTGAGACATTGCCAGGTCC, 329  
bp 53.0C

FIGURE 4

2Ax05.4 NaC-114, TTTTACCGTTGCTTCCTTA, NaC-115,  
TATCCCTTGCTCTTCATTATCT  
224bp 50.9C

2Ax06.1 NaC-169, GCCGGTAAAATAGCTGTTGAGTAG, NaC-170,  
GCCATTGCAAACATTATTCGTA 206bp 53.3C

2Ax06.2 NaC-171, GCGTGTGCGCTAATAG, NaC-172,  
CTAAGTCACCTGATTCACATCTAA  
295bp 48.0C

2Ax07 NaC-196, ACAGGGTGGCTGAAGTGTGTTA, NaC-197,  
GTGGGAGGTGGCAGGTTATT, 199  
bp, 52.6C

2Ax08 NaC-118, CAATTAGCAGACTGCCGTTATT, NaC-119,  
TCTCTGAGTTCGGTGTTATGA  
252bp 52.9C

2Ax09 NaC-120, ACCGAACCTCAAGAGAATTGCTGTA, NaC-121,  
AAAGGACCGTATGCTTGTTCACTA  
334bp 52.9C

2Ax10a.1 NaC-161 TATGAATGCGCATTACTCTTG, NaC-156  
TGGAGCTCAACTAGATGCTACTG  
286 bp 52.1C

2Ax10a.2 NaC-13 GGTGCTGGTGGATAGGAGTTTT, NaC-162  
TCCATTAAATTCTGGCATATTCTT,  
316 bp 50.9C

2Ax10b.1 NaC-145 TCAGAGGGGTGCTTCTTCCACAT, NaC-14  
CTTCGGCTGTCATTGTCCTCAAAG,  
298bp 55.6C

2Ax10b.2 NaC-146, GCAAAGGACATTGGCTCTGAGAAT, NaC-  
147, CTGCCTGCACCAGTCACAACCTCT  
324bp 59.4C

FIGURE 4 (cont'd)

2Ax10c NaC-190, TGGGCTTGCTGCTTCAA, NaC-191,  
AGTAACGTGACGCAGGACTTTA, 218  
bp 51.5C

2Ax11.1 NaC-148, CCCTGTCCTCCAGCAGATTAA, NaC-70  
GTGATGCCAGGTCAACAAA, 283  
bp, 51.5C

2Ax11.2 NaC-149, TTTGATTGGACTGTTGTAAC, NaC-  
150, AAGGCAATTATAAACTCTTCAAG  
233bp 52.0C

2Ax12 NaC-159, TGGGAGTTAAATTAAAGTTGCTCAA, NaC-160,  
ACATTTATGAACACTCCCAGTTA  
285bp 50.4C

2Ax13.1 NaC-239 ATTAACACTGTTCTGCTTTAT, NaC-240  
GTGCCAGCGTGGAGTTC 239 bp  
51.1C

2Ax13.2 NaC-241 GTGGGGCTCTAGGAAACCT, NaC-242  
TTAACATGAAAATGAGGAAAATGTT 324  
bp 53.7C

2Ax14.1 NaC-134, GACCAAGCATTTCATTTCATTTCATTTC, NaC-135,  
AGTGGCAGCAAGATTGTCA 234  
bp, 49.6C

2Ax14.2 NaC-136, GGCCTTGCTTGAGTTCC, NaC-137,  
GGTCTTGCTTATTCATGGTG, 257  
bp, 51.1C

2Ax14.3 NaC-266, TTAAACCGCTTGAAGATCTAAATA, NaC-267  
TATACACCAAAATATCTCCTTAT  
319bp 48.5C

2Ax15 NaC-314 GGGCACACCTAATTAAATTTCATT, NaC-315  
AAAGAGGATACTCAAGACCACATA  
(247bp) 51.5C

FIGURE 4 (cont'd)

2Ax16 NaC-344 CCCACCAACACAAATATACTAAT, NaC-345  
TGAAGGGAAAGGGAAAAGATT  
283bp 52.2C

2Ax17 NaC-346 TCCAGCCTTAGGCACCTGATAA NaC-347  
ATAAACAGCAAAGTCAGCATAC 310bp  
52.4C

2Ax18 NaC-348 AAGGCTGAACGTGTAGACATT TT NaC-349  
TGACATTCCATGGTACAAAGTGT  
262bp 52.2C

2Ax19.1 NaC-350 TTTGTTGTTGGCTTTCACTTAT NaC-351  
CCACCTGGCAGTTGATTG 268bp 51.9C

2Ax19.2 NaC-352 TAAGCGTGGTCAACAACTACAGT NaC-353  
ATTCTGCCAGCATTATTGTC  
260bp 50.2C

2Ax20 NaC-354 CAAAACATTGCCCAAAAG NaC-355  
TCAAAACTAAACAATTCCCTCTAA 239 bp 48.1C

2Ax21 NaC-306, GATAATTAAAAACTCACTGATGTA, NaC-307  
GGAGGCTAAAGGAAAGAGTATG  
288bp 46.6C

2Ax22 NaC-356 ATTTATAGCCAGCAAAGAACAC NaC-357  
CTAGAAATTGGCTGTGAA 230 bp 49.6C

2Ax23.1 NaC-358 CTGCTTGTGACCTAACCGCAAGTT NaC-359  
GTGACCATGTTAACCGAGATGAGG  
290bp 51.4C

2Ax23.2 NaC-360 GGAATGGCTTGATTTGTAACC NaC-361  
TCCTTAACTGAATAAAAGCACCTC  
290bp 51.6C

2Ax24.1 NaC-207 TGGAACACCCATCAAAGAAGATACT, NaC-208  
GTGGGAGTCCTGTTGACACAAAC  
278bp 52.8C

FIGURE 4 (cont'd)

2Ax24.2 NaC-209 AGCGATTATGGCATCAAAC, NaC-210  
ACGTGGTGGAAAGGCGTCATA 270 bp,  
52.9C

2Ax24.3 NaC-211 GCGACCCAGTTATAGAGTTGCC, NaC-212  
CTTGTGCGTTAACGTGGTC  
289bp 56.1C

2Ax24.4 NaC-213 CAAAGATCACCCCTGGAAGCTCAGTT,NaC-214  
ATCCAGGGCATCTGCAAAATCAGAA  
277bp55.8C

2Ax24.5 NaC-215 TGCCTATGTTAAGAGGGAAAGTTGGG, NaC-216  
ATGACCGCGATGTACATGTTAG  
279bp 55.3C

2Ax24.6 NaC-278 TCAATTGTTACAGCCCGTGATG, NaC-279  
TTTATACAAAGGCAGACAAACAT  
302bp 52.0C

2Ax24.7 NaC-280 AGGCGTAATGGCTACTCAGACGA, NaC-281  
GTAATCCCTCTCCCCAACATAAAC  
251bp 53.8C

2Ax24.8 NaC-282 TTTGATTACGGGTTGTTACTCTTA, NaC-283  
TTCTATGGAACATTACAGGCACATT 294bp 52.1C

2Ax24.9 NaC-284 TAATGTGCCTGAAATGTTCCATAGA, NaC-285  
CAGGCTTCTAGAAAGGACTGATAGG 264bp 50.6C

2Ax24.10 NaC-286 GTCCCAGCAGCATGACTATC, NaC-287  
CCCACTGGGTAAAATTACTAAC 249bp  
49.4C

2Ax24.11 NaC-288 TAGCCATCTTCTGCTCTGGT, NaC-289  
TGGCTTCCCATATTAGACTTCTG  
307bp 51.3C

2Ax24.12 NaC-290 TCTTGCCTATGCTGCTGTATCTTA, NaC-291  
AGTCGGGCTTTCATCATTGAG  
207bp 51.8C

FIGURE 4 (cont'd)

2Ax24.13 NaC-292 TTCTTCATGTCATTAAGCAATAGG, NaC-293  
TTCAATTAAAAGTGCTAGGAACA  
299bp49.4C

2Ax24.14 NaC-294 CTTCAGGTGGATGTCACAGTCACTA NaC-295  
ATTCAAGCAATGCCAACAGAGTATCA  
263bp51.5C

2Ax24.15 NaC-296 CTITCAATAGTAATGCCTTATCAT NaC-297  
TCCTGCATGCATTACCAAC  
348bp 49.6C

2Ax24.16 NaC-362 CTGTTCACATTTGTAAAACATAAT, NaC-263  
ATCCCAAAGATGGCGTAGATGA  
309 bp 50.8C

2Ax24.17 NaC-325 CACGCTGCTTTGCTTG, NaC-363  
GATCTTGTCAAGGTCACAGTCT 269  
bp 54.0C

FIGURE 4 (cont'd)

a. Lys908Arg:

normal: TAC AAA GAA;  
9782 (Patient with IGE): TAC AGA GAA;

b. leu768val, in individuals 8197, 9062 et 9822 (all IGE patients).

**FIGURE 5**

3Ax00a.1 NaC-390 TGTGTCCGCCAGTAGATGG, NaC-391  
TTTTGACCACAGAGGTTACAA 233bp  
51.4C

3Ax00a.2 NaC-392 GAAGCGGAGGCATAAGCAGA, NaC-393  
GGTGCAGATAATGAAATGTTTGT  
253bp 51.3C

3Ax00b NaC-394 CACCCCTATGCCAAATGTCAAAGA NaC-395  
CAAAAACAAACTTATAACCCAGAAG  
293bp 51.6C

3Ax00c NaC-396 CAAATATTGGCAAACCCCTAAT, NaC-397  
AAGGTGCCATCACAAAATCAT 225bp  
50.7C

3Ax01.1 NaC-51 ATCGCTTGCTTCCTAACTCTTGT, NaC-52  
AAGTCACTATTGGCTTGGTTG,  
260bp, 53.1C

3Ax01.2 NaC-53 AGAAGCCAAAAAGGAACAAGATA, NaC-54  
GGCCCAGAAAAGTATATTACAGTT,  
231bp, 50.8C

3Ax02 NaC-85, TCCTTAAATAAGCCCATGTCTAAT, NaC-86,  
TCTCAAAGAAATTACAGATACT,  
273bp, 47.3C

3Ax03 NaC-27, AATGGCCATGGTAACCTACTAACCA, NaC-28,  
CAGGCTATAACCCACAAGGAGATT,  
212 bp 51.8C

3Ax04 NaC-94, TGTAAATTGGCTTGGATGTT, NaC-95,  
TCACTCCTTGCCTATCAA, 198 bp  
50.8C

3Ax05.1 NaC-247, AGGGCTCTATGTGCCAAACC, NaC-248,  
AGGGGCCTACTACCTTACACCCAG 213  
bp 52.2C

FIGURE 6

3Ax05.2 NaC-249 TGTAAATCCCAGGTAAGAAGAAC, NaC-250  
TACCGGGATGAACTGTAATAATAA  
304 bp 51.8C

3Ax06.1 NaC-192, TTCTGGCACTCTCCTCAGGTAAC, NaC-  
193, GTCCCATTGAATCCATTGTGC,  
261bp 55.4C

3Ax06.2 NaC-194, GGCCCCAAGCGATTCTG, NaC-195,  
TGTACACCCACAGTCTCAACTATT,  
209bp, 50.3C

3Ax07 NaC-204, ACAGCCACCTTGTAATAAA, NaC-205,  
TTTTCGCAAAGAGAGTTCTAT  
220 bp, 46.6C

3Ax08 NaC-98, AAACTGACCCTACCTCCATTCTC, NaC-99,  
ACTCAGCCTATGCTTCATTCA,  
247 bp 53.2C

3Ax09 NaC-37 CAGATATTATTTGGGGACATTAT, NaC-38  
AAATCTTGCKTTATCACTCAGT, 295  
bp, 52.0C

3Ax10a.1 NaC-198 TAGTGCCTGGCTTGTATTATGAC, NaC-199  
CGGATTGGAAAGCTGTCTCT  
225 bp 54.3C

3Ax10a.2 NaC-200 AGAGCACCTGAAGGAAACAACAA, NaC-274,  
TCCCTCAACTGAAGTACAGATAGT, 253 bp 51.2C

3Ax10b NaC-33, ATAATTGCCTTCTTCCCCTACCC, NaC-34,  
AAGCCCTGGCACCATCCTG, 301  
bp, 56.2 °C

3Ax10c NaC-35, \_TTTGCAGAAATGCTATGT, NaC-36,  
CTGGGTAACAGACTTCAGTAAT, 303  
bp, 51.4 °C

3Ax11.1 NaC-122, ATGGGATTGTCTCTCAAGTTCT, NaC-123,  
GATGGCAAGATCAACAAATGGA  
294bp 50.3C

FIGURE 6 (cont'd)

3Ax11.2 NaC-124, CTTGATCTGGACTGCTGTGATG, NaC-125,  
AGGATATAATTGGTTCAACA  
284bp 51.5C

3Ax12 NaC-61, TTTTCAGTGCTCTGATAGTAGTG, NaC-62,  
GTGCCAATGAGCGACAGG, 254 bp,  
50.7°C

3Ax13.1 NaC-73, CCACGTGTGGTTCTATGATACC, NaC-74,  
ACCGTGGGAGCGTACAGTCA 298 bp  
52.3C

3Ax13.2 NaC-75, CGGCATGCAGCTTTGGTA, NaC-76,  
TGGCCACGTTCTAGCTACTGTC 291  
bp 55.9C

3Ax14.1 NaC-55, GAGTTCCCTTTAGGCTGTTATT, NaC-56  
TCTTATTGCCTTCATGGATTCTA,  
285bp, 50.5C

3Ax14.2 NaC-57, TGAAAAATAAGATGCGGGAGTG, NaC-58,  
GTGAGGCTGGGTTGTTATG, 247  
bp, 51.7C

3Ax14.3 NaC-59, GAGATGGAATGGAACCACCA, NaC-60,  
TTCGATAATGCATATAAGCACAA, 297  
bp, 51.7C

3Ax15 NaC-318 AAGGGGAAAATCACATCTT, NaC-319  
TTAAATGAGGCATATTCACTCTCC 235bp  
51.8C

3Ax16 NaC-116, GGAAGTGGAGTGGGAAGG, NaC-117,  
ATTCTGCCAATATGCATTCACT, 271  
bp, 51.1C

3Ax17 NaC-157, TTCTTTGTACTCACTATTACTAA, NaC-  
158, AAACCTGCCTTTAAAAACAAT  
317bp 46.6C

3Ax18 NaC-374 TACCACACCCTATACCTTCAGTCA, NaC-375  
GAGTATGGCACCCCTTCTATCTA  
275bp 51.4C

FIGURE 6 (cont'd)

3Ax19.1 NaC-386 GCTATGTTCCCCTCGCTGTCT, NaC-387  
TGCTTGCCAAGAGCCTGAC  
231bp 53.6C

3Ax19.2 NaC-388 GCTGGCAAGTTCTACCACTGTG, NaC-389  
CAAACGAAGAACATCAGGGAAATA  
247bp 53.0C

3Ax20 NaC-376 TTCACAATATTGTACAAAAAGTTA, NaC-377  
ATTACCACCAATATTCAACCATAAG  
230 bp 46.4C

3Ax21 NaC-378 TCAGGGTAAGGCAAAAGTAGCAC, NaC-379  
GAACCCCAGAACATGAAGAAAGGTAA 294  
bp 50.2C

3Ax22 NaC-380 TTTGTGAAAGTACTATTGGAACAC, NaC-381  
ACGCATGGCTTGAAACAT 204bp 49.6C

3Ax23.1 NaC-382 CCCGTATGTGGAAGGGCTTAT, NaC-383  
CTAGGTTGATCCGGGACAAAACTA  
246bp 52.9C

3Ax23.2 NaC-384 AACGGATGACCAGGGCAAATAC, NaC-385  
CTAGAAGGTCTGGGGCAACTG  
234bp 54.8C

3Ax24.1 NaC-317 AAGCCATCATGTAAAGTAAAAAG, NaC-320  
ATCCCAAAGATGGCATAGATA 274  
bp, 52.5C

3Ax24.2 NaC-325 CACGCTGCTTTGCTTG, NaC-326 TGAGCTGCCAGGGTGAATTG  
282 bp 54.9C

3Ax24.3 NaC-327 TTGCTAGCACCTATTCTTAATAGTGC NaC-328  
CCAGGGCAGCTGCAAAATCAGAG  
318bp 54.2C

3Ax24.4 NaC-329 CCCGATGCGACCCAGTTA, NaC-330 TGGAGGGTTGATGCCATA  
250 bp, 55.2C

FIGURE 6 (cont'd)

3Ax24.5 NaC-331 GATGGATGCCCTTCGAATACAGA, NaC-332  
TTCCCATTTAGTTGTCAATAATC  
258 bp 50.6C

3Ax24.6 NaC-321 AAGGGGAGGATTGACTTACCTAT, NaC-333  
TTGGCATGGACCTCCTCTTGA 302  
bp 51.5C

FIGURE 6 (cont'd)

a. Asn43DEL:

9706 (allele 1; IGE patient): CAA GAT AAT GAT GAT GAG ;

9632 (allele 2; patient has IGE): CAA GAT --- GAT GAT GAG ;

allele 1 = 131/146 (0.90);

allele 2= 15/146 (0.10);

for IGE patients: homozygotes (22): 3958, 9632; heterozygotes (12): 9049, 9152, 9649, 9710, 9896, 10069, 10191, 10213, 9993, 10009, 10256 (note that 2 patients are homozygous for the rare allele; all patients have IGE); in controls: allele 1 = 45/154 (0.94); allele 2 = 9/154 (0.06) and no 22 homozygotes found.

b. normal: tggtgtaaggtag,

10670 (IGE patient): tggtataaggtag

c. normal: ccccttatatctccaac,

10250 (IGE patient): ccccttatayctccaac;

d. Val1035Ile:

normal: AAA TAC GTA ATC GAT,

9269 (IGE patient): AAA TAC RTA ATC GAT; GTA>ATA = Val>Ile.

FIGURE 7